

# THE WATER SPOUT

## *The “Long Hot Summer” Issue*

Nebraska Department of Health and Human Services Regulation and Licensure  
Environmental Health Services Section

Volume XIX “SAFE DRINKING WATER IS WHAT WE SPOUT ABOUT” July, 2006

### **Know Your Water System Demand Characteristics**

By Michael Wentink, Training and Certification Officer, Field Services and Training

The past six summers in Nebraska have demonstrated the negative impact of drought on public water systems. The extent of those impacts has varied year to year. In 2000, the first year of close public water system drought impact monitoring, many water systems were identified as being potentially impacted by extreme drought conditions. A significant number of these systems substantiated the forecast and did experience negative impacts to water levels in wells and/or customer demands exceeding the capabilities of the water system. Other significant years of public water system impact were 2002 followed by 2004.

Typically, when negative drought impacts are experienced by a public water system, the first reaction is to issue restrictions on outdoor water use, primarily lawn watering. While this action is a prudent step to take, preliminary thought and research on the water system demand characteristics are necessary to avoid unexpected problems. Below are some items to consider when establishing water use restrictions. These items are based on experiences by various water systems in Nebraska over the past six years.

- Announce restrictions on the day they take place. By doing this, a water system can avoid the “one last time” high demand effect on the water system.
- Publicize the water use and consequences for noncompliance. Just as important as the issuance, lifting or modification of the restrictions should be publicized also.
- Consider the use of a rate structure to penalize excessive use during the summer months.

Financial impact can be an effective means of encouraging water conservation.

- Implement outdoor water use restrictions aimed at splitting up total demand among different days of the week and/or different periods of the day. Establish a schedule that will split up large areas of residential customers where outdoor lawn watering is prevalent.
- Establish a goal for reduction in water use with each stage of restriction that is imposed. If the goal is not met, move to the next more restrictive stage.

*The Water Spout* is published for public water systems and their operators by the NHHS R&L Environmental Health Services Section, Drinking Water Program. Web site address:  
<http://www.hhs.state.ne.us/enh/pwsindex.htm>  
Main phone number: (402) 471-2541

**24-hour Emergency Phone:  
(402) 499-6922**

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## **Sterling Awarded for Emergency Response**

Representatives of the Village of Sterling received recognition on June 13, 2006, from the Nebraska Department of Health and Human Services Regulation and Licensure (NHHS R&L) for their efforts in effectively responding to an emergency situation.

Severe weather on the evening of April 15, 2006 resulted in the loss of all electrical power to the community. It was estimated to be at least eight hours before power could be restored. The water operator, LeRoy Riensche, quickly informed NHHS R&L of the circumstances through the emergency phone number. With a limited amount of water available in storage to maintain water system pressure, Village Board members went door to door to advise customers of the situation and the need for water conservation.

Through these efforts, the Village was able to maintain adequate water system pressure and provide a safe supply of drinking water on a continuous basis.



Stan Karr, acting Chairman (left), receives plaque from Jack Daniel, Administrator of EHS Section.



LeRoy Riensche, water operator (left), receives plaque from Jack Daniel, Administrator of EHS Section.

## **Water Conservation and Drought**

By Randy Fischer, Field Services and Training Section

Another hot, dry summer is in the forecast. Rivers and reservoirs are already low. Consumer demand for water is sure to outstrip supply. Once again many parts of Nebraska are facing drought.

You can blame the situation on La Nina (the periodic cooling of ocean waters in the east-central equatorial pacific), or the excessive use of water by customers. But when it comes time to tell homeowners in residential areas that they can't wash their cars or water their lawns for the rest of the summer, it will be the city decision-makers who take the heat.

Conservation and drought are not black and white issues that can be settled merely by restricting water use. Communities need to understand the value of water and begin to discuss how to use it wisely. One of the most effective ways to cope with drought is to be proactive; to have every citizen take steps to get the most out of the water he or she uses.

Communities and individual homeowners can implement water conservation strategies. Here are a few of those:

1. Use a properly designed automatic irrigation system that has uniform water distribution.
2. Adjust water rates so excessive water users pay for the privilege of using too much water.
3. Encourage the use of an automatic rain shut-off device on sprinkler systems.
4. Group plants together that have the same water requirement. Use native plant material where appropriate.
5. Water lawns and plants separately.
6. Keep grass extra long during the hot summer months.
7. Cut back on watering until lawns and scrubs show some stress to conserve water.

Drought conditions in communities don't have to be an emergency. Unlike floods or tornadoes, water supply and demand imbalances can be anticipated and managed. The negative impacts can be lessened through proper planning.

Water conservation is a year-round effort that can prevent sudden inconvenience and possible economic loss in hot, dry weather. Educational resources for water conservation are available at: <http://www.hhs.state.ne.us/enh/pws/conindex.htm>

For more information contact Randy Fischer at (402) 471-1007 or by email at: [randy.fischer@hhs.ne.gov](mailto:randy.fischer@hhs.ne.gov).

# ASSISTANCE UPDATE

## **Prepare for Drought**

By Randy Fischer, Field Services and Training Section

Because of the impact on your public water system by the drought conditions that are predicted to persist and/or worsen as the summer progresses, the Nebraska Department of Health and Human Services Regulation and Licensure (NHHS R&L) encourages systems to closely monitor the performance of water system components. NHHS R&L is requesting that water systems record certain water quantity information daily and submit that information to NHHS R&L on a monthly basis.

The parameters that should be measured daily include: static water level (SWL), gallons per minute produced by the well (GPM), total gallons pumped, and the total number of run hours per day. These parameters should be measured on **each active well that the system is utilizing**.

Your system's cooperation in this matter will be greatly appreciated. By recording and submitting the requested information, NHHS R&L hopes to assist the public water systems to become more proactive in identifying developing trends or problems and working toward a solution before the lack of water becomes a problem.

NHHS R&L would also like to encourage those systems that have not already adopted an ordinance addressing the restriction of water use to do so in the very near future. If an ordinance is already in place and it becomes necessary to implement water use restrictions, the process typically goes much smoother for the water system and its customers. The ordinance should include a trigger mechanism that identifies when restrictions are to be in place, identify who has the authority to place restrictions on the system, what type of use is to be restricted, and how the restrictions will be enforced.

If your water system does experience negative impacts due to drought conditions (static water level or customer demand exceeding the water system capabilities or the issuance of water use restrictions), please contact Randy Fischer at (402) 471-1007 or (402) 416-2558, or contact your NHSS R&L Field Representative.

By working together, we have a much better chance of minimizing the impact of drought on public water systems if we begin to act now rather than later when the water supplies are not available.

## **USDA Rural Development Emergency Community Water Assistance Grants**

By Marty Norton, USDA Rural Development

The United States Department of Agriculture Rural Development has various financial assistance programs available for community infrastructures. More commonly known are the Water and Waste Disposal Loan and Grant Program and the Community Facilities Program. Another program that may not be commonly known, Emergency Community Water Assistance Grants, assist rural communities that have had a significant decline in quantity or quality of drinking water and may be required to have a Presidential emergency designation. Historically, this program has not been funded by Congress each fiscal year. Contact your local USDA Rural Development Office to check on availability of funding.

These emergency assistance grants can be made to rural areas, towns, and cities with a population of 10,000 or less and a median household income not in excess of 100 percent of the state's non-metropolitan median household income, and may be made for 100 percent of project cost.

For details regarding the USDA Rural Development Water and Waste Water Loan and Grant Program & Emergency Community Water Assistance Grant, contact Denise Brosius-Meeks at USDA Rural Development in Lincoln at 402-437-5559 or [denise.meeks@ne.usda.gov](mailto:denise.meeks@ne.usda.gov), or visit the USDA Rural Development Web site for Nebraska at [www.rurdev.usda.gov/ne](http://www.rurdev.usda.gov/ne).

## **New Capacity Development Employee**

Scott Sprague has been hired by the NHHS R&L Drinking Water Program for the position of Capacity Development Coordinator.

Capacity development is a State effort to help drinking water systems improve their technical, financial and managerial capabilities.

For 30 years Scott held various positions including Water/Wastewater Superintendent, Street Superintendent, and City Administrator for the City of Ainsworth Nebraska. For the last 1 ½ years he has been employed by the City of Valentine.

If you have questions or want to learn more about capacity development, contact Scott by phone at (402) 471-0088, or by e-mail at: [scott.sprague@hhss.ne.gov](mailto:scott.sprague@hhss.ne.gov).

## Grades I-IV and VI Continuing Education – 2006

**Please contact the appropriate organization for further detailed information regarding these scheduled training activities.**

			Hours Available for Grade						
Date	Location	Topic	I	II	III	IV	VI	Contact	Phone
July 13	Gretna	Water Operator	TBA	TBA	TBA	TBA	TBA	CCC	1-877-222-0780
July 19	Fremont	EXPO	5	5	5	5	0	NeRWA	402-443-5216
July 20-21	Kearney	Heartland Conf	2.5	2.5	2.5	2.5	0	NWOD	402-423-9081
July 25	Ainsworth	Water Operator	5	5	5	5	0	NeRWA	402-443-5216
July 27	Arapahoe	Water Operator	5	5	5	5	0	NeRWA	402-443-5216
August 1	Hastings	Water Operator	TBA	TBA	TBA	TBA	TBA	CCC	1-877-222-0780
August 2	Scottsbluff	Water Operator	3	3	3	3	0	NHHS R&L	402-471-0523
August 3	Holdrege	Water Operator	5	5	5	5	0	CCC	1-877-222-0780
August 15	Ponca	Water Operator	TBA	TBA	TBA	TBA	TBA	NeRWA	402-443-5216
August 17	Syracuse	Water Operator	TBA	TBA	TBA	TBA	TBA	NeRWA	402-443-5216
August 22	Lincoln	Water Operator	TBA	TBA	TBA	TBA	TBA	NHHS R&L	402-471-0597
August 23	Humphrey	Water Operator	TBA	TBA	TBA	TBA	TBA	NeRWA	402-443-5216
September 5	Nebraska City	Water Operator	TBA	TBA	TBA	TBA	TBA	CCC	1-877-222-0780
September 6	North Platte	Water Operator	TBA	TBA	TBA	TBA	TBA	MAP	402-846-5123
September 7	Norfolk	Water Operator	TBA	TBA	TBA	TBA	TBA	MAP	402-846-5123
September 7	Denton	Water Operator	TBA	TBA	TBA	TBA	TBA	NeRWA	402-443-5216
September 12	Chappell	Water Operator	5	5	5	5	0	LoNM/AWWA	402-476-2829
September 13	North Platte	Water Operator	5	5	5	5	0	LoNM/AWWA	402-476-2829
September 14	McCook	Water Operator	5	5	5	5	0	LoNM/AWWA	402-476-2829
September 14	Papillion	Water Operator	TBA	TBA	TBA	TBA	TBA	NeRWA	402-443-5216
September 18	Ogallala	Backflow	5	5	5	5	5	AWWA	402-476-2829
September 19	Grand Island	Backflow	5	5	5	5	5	AWWA	402-476-2829
September 20	Wayne	Backflow	5	5	5	5	5	AWWA	402-476-2829
September 20	North Platte	Water Operator	TBA	TBA	TBA	TBA	TBA	CCC	1-877-222-0780
September 21	Beatrice	Backflow	5	5	5	5	5	AWWA	402-476-2829
September 26	Fremont	Water Operator	3	3	3	3	0	NHHS R&L	402-471-0523
October 3	Grand Island	Backflow	TBA	TBA	TBA	TBA	TBA	CCC	1-877-222-0780
October 5	North Platte	Backflow	TBA	TBA	TBA	TBA	TBA	CCC	1-877-222-0780
Oct. 10-11	Gering	Fall Conf.	10	10	10	10	5	NeRWA	402-443-5216
October 11	Ord	Water Operator	5	5	5	5	0	LoNM/AWWA	402-476-2829
October 12	Blair	Backflow	TBA	TBA	TBA	TBA	TBA	Backflow Res.	712-946-5823
October 17	Papillion	Backflow	TBA	TBA	TBA	TBA	TBA	E. NE ABPA	402-476-2055
October 17	Wahoo	Water Operator	TBA	TBA	TBA	TBA	TBA	NeRWA	402-443-5216
October 18	Wahoo	Water Operator	TBA	TBA	TBA	TBA	TBA	NeRWA	402-443-5216
October 24	Plainview	Water Operator	TBA	TBA	TBA	TBA	TBA	NeRWA	402-443-5216
October 26	Broken Bow	Water Operator	TBA	TBA	TBA	TBA	TBA	NeRWA	402-443-5216
October 31	Chadron	Backflow	TBA	TBA	TBA	TBA	TBA	Backflow Res.	712-946-5823
November 1	Valentine	Backflow	TBA	TBA	TBA	TBA	TBA	Backflow Res.	712-946-5823
November 2	O'Neill	Backflow	TBA	TBA	TBA	TBA	TBA	Backflow Res.	712-946-5823

**TBA – Hours not assigned at time of printing.**

**Backflow Res. – Total Backflow Resources, Salix IA**

**LoNM – League of Nebraska Municipalities, Lincoln**

**AWWA – Nebraska Section American Water Works Association**

**CCC – Central Community College, Grand Island; When calling the 877 number select extension #7527, or call (308) 398-7527.**

**E. NE ABPA – Eastern Nebraska Section of American Backflow Prevention Association**

**NWOD – Nebraska Wastewater Operators Division**

**NeRWA – Nebraska Rural Water Association, Wahoo**

**MAP – Midwest Assistance Program**

**NHHS R&L – Nebraska Department of Health and Human Services Regulation and Licensure**

# Water Operator Courses

**Register Early!!!**  
**Registration required at least two**  
**weeks prior to the class (Seating**  
**is limited).** Call Barb at:  
 (402) 471-0523.

## 2006 Courses

### Grade IV

Cost is \$80.00 for the class, \$90.00 for the books if needed, and \$94.00 for certification.

August 3 – 4	Scottsbluff
September 27 – 28	Fremont
November 29 – 30	Grand Island

### PWS Regulation Review

Strongly Encouraged for Grade IV Course Attendees

August 2	Scottsbluff
September 26	Fremont
November 28	Grand Island

### Grade III

Cost is \$200.00 for the class, \$90.00 for the books if needed, and \$94.00 for certification.

October 2 – 6	Grand Island
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### Grade I & II (combined)

Cost is \$200.00 for the class, \$90.00 for the books if needed, and \$94.00 for certification.

August 14 – 18	Lincoln
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### Grade VI Training Classes

September 18 – 27      Omaha  
 These are evening training sessions.  
 Contact Jim Wonder at (402) 455-0117

October 2 – 6      Wahoo  
 Contact the Nebraska Rural Water Association  
 at (402) 443-5216, or 1-800-842-8039

October 9 – 13      Blair  
 Contact Total Backflow Resources at  
 (712) 946-5823 or 1- 888-305-5292

November 13 – 17    Hastings **CANCELLED**  
 Contact the Central Community College at (308)  
 398-7527 or 1-877-222-0780, extension 7527

Nov. 27 – Dec. 1      Papillion  
 Contact Total Backflow Resources at  
 (712) 946-5823 or 1- 888-305-5292

December 11 – 15      Kearney  
 Contact Total Backflow Resources at  
 (712) 946-5823 or 1- 888-305-5292

### Reminder

If you are due to renew your water operator certification this year, make efforts to acquire your 15 hours of continuing education prior to October 1. If that is done, renewal of your certificate will be a very smooth process. There are many opportunities to obtain these hours every year. Look at the 2006 Nebraska Coalition training calendar and contact the training provider regarding the specifics about the training events you are interested in.

### Title 179 Latest Revision Dates of Regulations

<u>NAC</u>	
2-001	November 15, 2003
2-002	November 13, 2005
2-007	September 15, 1991
2-015	September 22, 1999
3	November 13, 2005
4	November 13, 2005
5	July 16, 2002
6	March 22, 2004
8	Reserved
9	March 22, 2004
10	October 3, 2004
11	November 15, 2003
12	November 15, 2003
13	November 15, 2003
14	November 13, 2005
16	November 13, 2005
17	November 13, 2005
18	November 15, 2003
19	November 13, 2005
21	March 22, 2004
22	March 22, 2004

These regulations can be viewed at:  
<http://www.hhs.state.ne.us/reg/t179.htm>